FOR THE RECORD

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Eastern Chinese Population Data on Four STR Forensic Loci: CSF1PO, TH01, TPOX, vWA

POPULATION: Han in eastern China

KEYWORDS: forensic science, DNA typing, short tandem repeats, eastern Chinese population, population genetics, CSF1PO, TH01, TPOX, vWA

TABLE 1—Allele frequencies for four STR loci in eastern Chinese population.

| | Locus | | | | |
|--------|-------|------------------|----------------|----------------|--|
| Allele | | TH01 $(n = 106)$ | TPOX (n = 103) | vWA (n = 107) | |
| 6 | | 0.099 | | | |
| 7 | 0.005 | 0.283 | 0.010 | | |
| 8 | | 0.019 | 0.553 | | |
| 9 | 0.054 | 0.533 | 0.131 | | |
| 9.3 | | 0.033 | | | |
| 10 | 0.238 | 0.033 | 0.015 | | |
| 11 | 0.203 | | 0.262 | | |
| 12 | 0.332 | | 0.029 | | |
| 13 | 0.134 | | | | |
| 14 | 0.035 | | | 0.276 | |
| 15 | | | | 0.037 | |
| 16 | | | | 0.145 | |
| 17 | | | | 0.192 | |
| 18 | | | | 0.145 | |
| 19 | | | | 0.192 | |
| 20 | | | | 0.014 | |

The samples for this study were drawn randomly from Han-ethnic individuals representing various geographical counties in eastern China, under their consent. Genomic DNA was extracted from whole blood samples using the Chelex extraction procedure (1). The amplification of the four genetic STR loci, CSF1PO,TH01,TPOX and vWA was carried out using an Eppendorf Mastercycler gradient system. PCR was performed using 1-30 ng of genomic DNA in a 37.5 µL final reaction volume. The PCR products were analyzed by non-denaturing polyacrylamide gel electrophoresis and visualized by silver staining (2). Allele designation was established following the recommendations of the DNA commission of the ISFH (3). Observed heterozygosity (H_o), polymorphic information content (PIC) and power of discrimination (PD) were calculated using Powerstats program (4). The genotype distribution was analyzed for Hardy-Weinberg equilibrium according to Hou's method (5) and no deviation from Hardy-Weinberg equilibrium was observed.

TABLE 2—Forensic statistics of four STR loci in eastern Chinese population.

| | Forensic Efficiency Parameters | | | | |
|--------|--------------------------------|-------|-------|-------|--|
| Locus | H _o | DP | PE | PIC | |
| CSF1PO | 0.792 | 0.906 | 0.619 | 0.730 | |
| TH01 | 0.660 | 0.804 | 0.414 | 0.570 | |
| TPOX | 0.650 | 0.770 | 0.394 | 0.550 | |
| vWA | 0.841 | 0.929 | 0.702 | 0.780 | |

PIC: (polymorphism information content), DP: (power of discrimination), CE: (power of exclusion), H_o : (observed heterozygosity).

The observed allele frequencies in the eastern Chinese population sample for the four STR genetic loci and some forensic efficiency parameters are shown in Table 1 and Table 2.

The complete dataset can be obtained from the authors on request to yuzhengao@suda.edu.cn.

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